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(54) **Mass spectrometer**

(57) A mass spectrometer is disclosed comprising a first ion trap or ion guide (2), a single ion mobility spectrometer or separator stage (3) and a second ion trap or ion guide (4) arranged downstream of the ion mobility

spectrometer or separator (3). In a mode of operation ions from the second ion trap or ion guide (4) are passed from the second ion trap or ion guide (4) back upstream to the ion mobility spectrometer or separator (3).

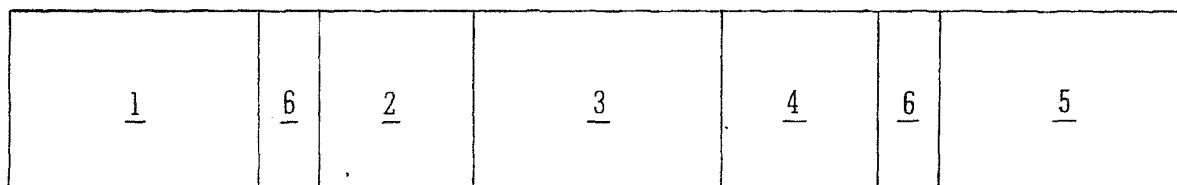


FIG. 1

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EUROPEAN SEARCH REPORT

Application Number
EP 12 15 5528

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
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			TECHNICAL FIELDS SEARCHED (IPC)
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The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 24 May 2012	Examiner Loiseleur, Pierre
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	

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**ANNEX TO THE EUROPEAN SEARCH REPORT
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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
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